This Environmental Impact Report (EIR) has been prepared to provide an assessment of the potentially significant environmental effects of the proposed Computational Research and Theory Facility Project (hereinafter termed CRT or proposed project). As required by California Environmental Quality Act (CEQA), this Draft EIR: (1) assesses the potentially significant environmental effects of the proposed project, including cumulative impacts of the proposed project in conjunction with other development; (2) identifies feasible means of avoiding or substantially lessening significant adverse impacts; and (3) evaluates a range of reasonable alternatives to the proposed project, including the No Project Alternative. The University of California (the University) is the "lead agency" for the project evaluated in this Draft EIR. The Board of Regents of the University of California (The Regents) has the principal responsibility for approving this project.

## 1.1 PURPOSE OF THIS EIR

The Berkeley Lab has commissioned this EIR on the CRT project for the following purposes:

- To inform the general public, the local community, and responsible, trustee, and other public
  agencies of the nature of the proposed project, its potentially significant environmental effects,
  feasible measures to mitigate those effects, and its reasonable and feasible alternatives;
- To enable the University to consider the environmental consequences of approving the CRT project;
- For consideration by responsible agencies in issuing permits and approvals for the proposed project;
   and
- To satisfy CEQA requirements.

As described in CEQA and the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, where feasible. In discharging this duty, a public agency has an obligation to balance the project's significant effects on the environment with its benefits, including economic, social, technological, legal, and other benefits. This EIR is an informational document, the purpose of which is to identify the potentially significant effects of the proposed project on the environment and to indicate the manner in which those significant effects can be avoided or significantly lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated; and to identify reasonable and feasible alternatives to the proposed project that would eliminate significant adverse environmental effects or reduce the impacts to a less than significant level.

The lead agency is required to consider the information in the EIR, along with any other relevant information, in making its decisions on the proposed project. Although the EIR does not determine the

ultimate decision that will be made regarding implementation of the project, CEQA requires the University to consider the information in the EIR and make findings regarding each significant effect identified in the EIR. The Regents must certify the Final EIR prior to approving the proposed project. Other agencies may also use this EIR in their review and approval processes.

## 1.2 SUMMARY OF THE PROPOSED PROJECT

Lawrence Berkeley National Laboratory (LBNL) proposes to construct and operate the CRT Facility Project that would be located in the western portion of LBNL in Berkeley, Alameda County, California. The proposed project includes an approximately 140,000-gross-square-foot building and associated infrastructure. The proposed facility would provide new advanced computational equipment and office space to support LBNL and UC Berkeley's research and academic programs and the needs of computer scientists, mathematicians, computer scientists, and theoreticians who are currently engaged in high performance computing and high performance production computing and computational research.

# 1.3 RELATIONSHIP BETWEEN LBNL, UNIVERSITY OF CALIFORNIA, AND THE U.S. DEPARTMENT OF ENERGY

LBNL is a federal facility managed and operated by the University of California under a U.S. Department of Energy (DOE)-UC contract. The research, service, and training work conducted at LBNL is within the University's mission and the land is owned by The Regents of the University of California. The federal government leases land at the Berkeley Lab from The Regents and constructs federally owned buildings on the leased lands. The University is a Management and Operating (M&O) contractor of LBNL as defined under the U.S. DOE Acquisition Regulations. As the Laboratory's M&O Contractor, the University is responsible for providing the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff the Laboratory; accomplish the missions and activities assigned and funded by DOE to the Laboratory; administer the DOE-UC Prime Contract; and provide University oversight of the Laboratory's contract compliance and performance. The Prime Contract (Contract 31) provides the overall statement of work to be performed and the terms and conditions of its performance for the federal government. The contract calls for budget and program planning that is coupled to the Department of Energy and its plans and the federal budgeting process.

LBNL's programs advance four distinct goals for DOE and the nation:

- To perform leading multidisciplinary research in the computing sciences, physical sciences, energy sciences, biosciences, and general sciences in a manner that ensures employee and public safety and protection of the environment;
- To develop and operate unique national experimental facilities for qualified investigators;

 To educate and train future generations of scientists and engineers by promoting national science and education; and

 To transfer knowledge and technological innovations and to foster productive relationships among the LBNL research programs, universities, and industry in order to promote national economic competitiveness.

Classified research is not conducted at LBNL.

Because The Regents may re-acquire full responsibility for the lands should the federal government close LBNL, and for effective ongoing management, The Regents hold themselves accountable for the stewardship of LBNL within the State of California. The Regents require and approve the University-defined Long Range Development Plan (LRDP) and require that its approval be consistent with the University's policy that an LRDP undergo CEQA review and approval. Therefore, in 2004, under the direction of the University, LBNL commenced the preparation of an update to its LRDP. The Regents certified the 2006 LRDP EIR and adopted the 2006 LRDP in July 2007; it is now the governing land use plan for the Berkeley Lab's hill site.

## 1.4 ENVIRONMENTAL REVIEW PROCESS

LBNL has filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research State Clearinghouse indicating that this Draft EIR has been completed and is available for review and comment by the public.<sup>1</sup>

This Draft EIR is available for review by the public and interested parties, agencies, and organizations for a review period of 45 days, as required by California law. In reviewing the Draft EIR, reviewers should focus on the document's adequacy in identifying and analyzing significant effects on the environment and ways in which the significant effects of the project might be avoided or mitigated. To ensure inclusion in the Final EIR and full consideration by the lead agency, comments on the Draft EIR must be received during the 45-day public review period at the following address:

Lawrence Berkeley National Laboratory
One Cyclotron Road, MS 69-201
Berkeley, California 94720
Contact: Jeff Philliber, Environmental Planning Group Coordinator planning@lbl.gov

LBNL has also prepared another EIR for the Helios Energy Research (Helios) Facility project. Both Helios EIR and this EIR will be circulated for agency and public review for a period of 45 days. Both the CRT and the Helios projects would be located at LBNL's hill site location and would be built over approximately the same period of time. This EIR considers the Helios project in the cumulative impact analysis of the CRT project (see Section 5.0, Cumulative Impacts).

Pursuant to state law (Public Resources Code Section 21091(d)(3)), the Berkeley Lab will accept e-mail comments in addition to mailed comments or oral comments made at the Draft EIR public hearing. Reviewers are encouraged to follow up on any e-mail comments with letters. A public hearing will be held during the 45-day review period to provide the public with an opportunity to comment on the Draft EIR. Following the close of the 45-day review period, responses to comments on the Draft EIR will be prepared and published as a separate document. The Draft EIR text and appendices, together with responses to comments and any text changes made to the original Draft EIR, will constitute the Final EIR.

The Regents, the decision-making body for the University, will review LBNL's CRT Facility Project Final EIR for adequacy and consider it for certification pursuant to the requirements of Section 15090 of the State CEQA Guidelines. If The Regents certify the Final EIR, then The Regents will consider the project separately for approval or denial. If The Regents choose to approve the project, findings on the feasibility of reducing or avoiding significant environmental effects will be made and, if necessary, a Statement of Overriding Considerations will be prepared. If The Regents approve the project, a Notice of Determination (NOD) will also be prepared and will be filed with the State Clearinghouse. The NOD will include a description of the project, the date of approval, an indication of whether the Findings were prepared and a Statement of Overriding Considerations was adopted, and the address where the Final EIR and record of project approval are available for review.

## 1.4.1 Type of EIR

This is a project EIR prepared pursuant to Section 15161 of the CEQA Guidelines. Because the proposed project is an element of the growth projected under the 2006 LRDP, relevant mitigation measures identified in the 2006 LRDP EIR and adopted by The Regents in conjunction with the approval of the 2006 LRDP have been included in and made part of the CRT project. These mitigation measures are listed in each resource subsection of Section 4.0. The analysis presented in Section 4.0 evaluates environmental impacts that would result from project implementation following the application of these mitigation measures. These mitigation measures that are included in the project would be monitored pursuant to the Mitigation Monitoring and Reporting Plan that will be adopted for the proposed project.

The 2006 LRDP EIR was certified by the Regents on July 19, 2007. Several individuals have since filed a lawsuit challenging the Regents certification of the EIR (Jones et al. v. Regents, Alameda County Superior Court Case No. RG07341224). That case is currently pending and, unless and until the court determines otherwise, the Regents certification of the EIR remains in effect.

## 1.4.2 Public and Agency Review

On July 26, 2007, a Notice of Preparation (NOP), including an Initial Study, was published for the Computation Research and Theory Facility Project EIR. The 30-day comment period ended on August 24, 2007. A copy of the NOP and the Initial Study is included in Appendix 1.0. All comments received on the NOP are available on file with LBNL.

An EIR scoping meeting was held at the North Berkeley Senior Center on August 8, 2007. This meeting served the purpose of informing the public and interested agencies of the proposed project, soliciting comments, and identifying areas of concern.

Copies of this EIR and the 2006 LRDP are available for review online at http://www.lbl.gov/Community/env-rev-docs.html or at the following locations:

- Berkeley Public Library, 2090 Kittredge Street, 2nd Floor Reference Desk, Berkeley, CA 94704
- Berkeley Laboratory Main Library, One Cyclotron Road, Building 50, Room 4034, Berkeley, CA 94720

## 1.4.3 Intended Uses of this EIR

This document serves two purposes. The Regents will use this EIR to evaluate the environmental implications of approving the CRT project for implementation. Secondly, this document may be used as a source of information by responsible agencies with permitting or approval authority over the project.

#### 1.5 SCOPE OF THIS EIR

The Berkeley Lab completed a preliminary review of the project, as described in Section 15060 of the CEQA Guidelines, and determined that an environmental review was required. The Berkeley Lab prepared an Initial Study in July of 2007 and determined that an EIR was necessary. Based on the Initial Study and the comments received at the scoping meeting and in response to the NOP, it was determined that the EIR would evaluate the following environmental topics in further detail:

- Aesthetics:
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;

- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services and Recreation;
- Transportation and Traffic; and
- Utilities, Service Systems, and Energy.

### 1.6 REPORT ORGANIZATION

This Draft EIR is organized into the following sections:

Section 1.0, Introduction, provides an introduction and overview describing the purpose and scope of topics addressed in this EIR and the environmental review process.

Section 2.0, Executive Summary, summarizes environmental consequences that would result from the proposed project, provides a summary table that denotes anticipated significant environmental impacts, describes identified mitigation measures, and indicates the level of significance of impacts before and after mitigation.

Section 3.0, Project Description, describes the proposed project.

Section 4.0, Environmental Setting, Impacts, and Mitigation Measures, describes the environmental setting, including applicable plans and policies; provides an analysis of the potential environmental impacts of the proposed project; and identifies mitigation measures to reduce their significance.

Section 5.0, Cumulative Impacts, presents the cumulative environmental impacts of the proposed project, in conjunction with other approved, pending, or reasonably foreseeable near term and long term development in the project area.

Section 6.0, Alternatives, summarizes alternatives to the project and the comparative environmental consequences and benefits of each alternative. This section includes an analysis of the No Project Alternative, among others, as required by CEQA.

Section 7.0, Other CEQA Considerations, provides a discussion of the potential for growth inducement from the project and provides a brief description of the environmental effects that were found not to be significant and, therefore, not evaluated in further detail.

Section 8.0, Organizations and Persons Consulted, provides a list of organizations and individuals who were contacted in the preparation of the EIR.

Section 9.0, Report Preparation, provides a list of the individuals involved in the preparation of this EIR.

Section 10.0, Acronyms and Abbreviations, identifies and defines frequently used acronyms and abbreviations used in the EIR.